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United States Patent [19]
Schatz

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- [54] **EXPANDABLE INTRALUMINAL GRAFT**
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4,776,337 10/1988 Palmaz 623/1
4,800,882 1/1989 Gianturio 128/343
4,856,316 8/1989 Hillstead 623/12
4,969,458 11/1990 Wiktor 606/194
5,102,417 4/1992 Palmaz 606/195
5,135,336 8/1992 Hillstead 606/195

OTHER PUBLICATIONS

"Self-Expanding Endovascular Graft: An Experimental Study in Dogs" 151 AJR 673-76, Oct. 1988 (first made available to the public on Sep. 20, 1988).

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- Related U.S. Application Data**
[63] Continuation of Ser. No. 253,115, Oct. 4, 1988, abandoned.
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[52] **U.S. Cl.** 606/195; 606/193;
606/194; 623/1; 604/104; 604/96
[58] **Field of Search** 600/36; 604/96, 104;
606/193, 194, 195; 623/1, 12

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,744,596 11/1973 Cook 128/343
4,512,338 4/1985 Balko et al. 128/341
4,553,545 11/1985 Maass et al. 128/341
4,733,665 3/1988 Palmaz 623/1
4,739,762 4/1988 Palmaz 623/1
4,760,849 8/1988 Kropf 128/343

[57] **ABSTRACT**

A plurality of expandable and deformable intraluminal vascular grafts are expanded within a blood vessel by an angioplasty balloon associated with a catheter to dilate and expand the lumen of a blood vessel. The grafts may be thin-walled tubular members having a plurality of slots disposed substantially parallel to the longitudinal axis of the tubular members, and adjacent grafts are flexibly connected by a single connector member disposed substantially parallel to the longitudinal axis of the tubular members.

6 Claims, 3 Drawing Sheets

